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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/809,141

03/15/2001

Daniel Lieberman

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01/29/2007

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EXAMINER

CULBERT, ROBERTS P

ART UNIT

PAPER NUMBER

1763

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/809,141

Applicant(s)

LIEBERMAN, DANIEL

Examiner

Roberts Culbert

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after notice of appeal to the Board of Patent Appeals and Interferences, but prior to filing the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1//10/07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

While the roller and film are in contact, they move together at the same speed, and the position of the roller surface relative to the web surface remains the same. According to the specification, the registration marks are used to adjust the speed of the roller and film. It is not clear how the changing speed of the roller and film causes the demetalization location to change relative to the pre-printed image (i.e.; in register) since the location of the demetalization pattern is fixed relative to the pre-printed web.

Applicant's amendment to the specification does not clarify the issue, since even the amended specification states "***The speed at which the web 40 travels... is controlled by a servo motor 11 attached to the demetalization station.***" Thus it is not clear how the change in speed of the roll and web (which move together through a roller bank) somehow affects the location of the second printing with etchant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,959,120 to Wilson in view of U.S. Patent 6,082,778 to Solmsdorf and in further view of U.S. Patent 6,053,107 to Hertel et al.

Regarding Claim 1, Wilson teaches a method for the selective demetallization of a web coated with a metal film. Referring to figure 7, Wilson shows conveying the web material through a demetallization station including indexing means (reads on means to rotate a print roller) whereby predetermined portions of the metal film are removed or thinned to create or reveal visual elements of the web material.

Although Wilson suggests that the process is useful for making security documents such as a credit card or currency (Col. 7, Line 29-32), Wilson does not expressly show the use of a web having a preprinted image. However, it is well known in the art of making security documents to provide a substrate having a preprinted image and to demetallize a metal layer in register with the preprinted image. For example, Solmsdorf teaches providing a substrate having preprinted information and demetallizing in register to the preprinted information in order to form a copy protection element. (See Figures 1-3 and Col. 3, Lines 23-67). It would have been obvious to one of ordinary skill in the art at the time of invention to provide the web of Wilson with a pre-printed image in order to produce a security document containing visible printed information as shown by Solmsdorf.

Wilson in view of Solmsdorf does not teach providing a registration mark and an indexing means for adjusting a speed of the demetallization roll, observing the registration mark with an observation means prior to passage of the pre-printed web through the demetallization station and in response to

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such observation causing the indexing means to align the demetallization roll to be in register with the pre-printed web. However, the use of registration marks, indexing means, and observation means is well known in the printing art for aligning a printing roll to a preprinted image. For example, Hertel et al. teach providing a registration mark (Col. 4, Lines 1-3 and Col. 5, lines 57-65) and an indexing means for adjusting a speed of the printing roll (Col. 3, Lines 12-29), observing the registration mark with an observation means (eyemark sensor) prior to passage of the pre-printed web through the printing station and in response to such observation causing the indexing means to align the printing roll to be in register with the pre-printed web. (Col. 3, Line 12 – Col. 6, Line 44) In view of Hertel et al, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a registration mark on the preprinted substrate and an indexing means for adjusting a speed of the demetallization roll, observing the registration mark with an observation means prior to passage of the pre-printed web through the demetallization station and in response to such observation causing the indexing means to align the demetallization roll to be in register with the pre-printed web in order to provide automated alignment of a demetallized image with a preprinted image.

Regarding Claims 2, 4 and 6, Hertel et al. teach the image on the pre-printed web is formed by a flexographic printing process. (Col. 3, Lines 44-55)

Regarding Claim 3, Solmsdorf teaches the placement may comprise embossing. (Col. 5, Lines 40-48)

Regarding Claim 5, Solmsdorf teach the optical image formation comprises formation of holographic or diffractive optical images. (Col. 5, Lines 39-53)

Regarding Claim 7, Solmsdorf teaches adhering the demetallized web to a second pre-printed web having discrete adhesive areas, wherein the adhesive areas are used to transfer the demetallized registered areas onto the second pre-printed web in register to printing on the second pre-printed web. See Figure 1, Col. 5, lines 39-53 and Col. 6, Lines 19-63)

Regarding Claim 8, Solmsdorf teaches that demetallization reveals designs or patterns hidden in the original images placed on the web. (Col. 3, Lines 60-63)

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Regarding claim 9, the use of moiré patterns in security documents such as currency is old and well known in the art as admitted by applicant (paragraph 35). It would have been obvious to one of ordinary skill in the art at the time invention to use a moiré pattern in order to produce a document that is extremely difficult to duplicate.

Regarding Claim 10, Solmsdorf teach the demetallization removes metal from an area adjacent to but not covering the image. (See images of numerals 1, 2 and 3 in Figure 2, for example)

Regarding Claim 11, Wilson teach the pre-printed web comprises a continuous roll of film or paper. Solmsdorf teach a substrate containing holographic, diffractive, optical variable images or patterns, optically computer-generated holograms, holographic or diffractive dot- matrix images or patterns, or non-holographic images or patterns. (See Figures 1 and 2)

Regarding Claim 12, Wilson teaches the pre-printed web material comprises film or paper. (Col. 2, Lines 16-17)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberts Culbert whose telephone number is (571) 272-1433. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



R. Culbert
Examiner
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